CONSOLIDATED ANALYTICAL SYSTEMS

TE-6070V Sampler Calibration Worksheet
(Using G-Factor)

Customer Co./Org.	S.H. Bell
Customer Contact	Jim Langbehn
Project No.	17-3007
Insturment Model	TE-6070V
ID/Serial No.	P10245BL (HV1)
Instrument Site	S4
VFC G-Factor	0.0236455000

Date	June 13, 2017
Technician Initials	TP
Location	Chicago, IL
Time of arrival	8:00
Time of departure	10:00
Service	Flow Verification

Ambient Conditions

Temp (°F)	34.8	**BP (in Hg)**	29.34
Ta (°K)	275	**Pa (mm Hg):**	744.5
Ta (°C)	1.6		

Calibration Orifice

Make	Tisch
Model	TE-5028A
Serial #:	3303
Qa Slope (m):	0.93771
Qa Int (b):	0.00061
Calibration Due Date:	03/01/18

Calibration Information

Run Number	Orifice "H2O	Qa m3/min	Sampler "H2O	Pf mm Hg	Po/Pa	Calculated m3/min	% of Diff
1	3.00	1.121	4.50	8.398	0.989	1.171	4.46
2	3.00	1.121	7.70	14.370	0.981	1.161	3.57
3	3.00	1.121	9.40	17.543	0.976	1.156	3.12
4	3.00	1.121	10.60	19.783	0.973	1.152	2.77
5	2.95	1.112	11.10	20.716	0.972	1.150	3.51

Calculate Total Air Volume Using G-Factor

Enter Average Temperature During Sampling Duration (Deg F)

Average Temperature During Sampling Duration (Deg K) 255.22

Enter Average Barometric Pressure During Sampling Duration (In Hg)

Average Barometric Pressure During Sampling (mm Hg) 0.00

Enter Clean Filter Sampler Inches of Water

Enter Dirty Filter Sampler Inches of Water

Average Filter Sampler (mm Hg) #DIV/0!

Enter Total Runtime in Hours (xx.xx)

Po/Pa #DIV/0!

Calculated Flow Rate (m3/min) #DIV/0!

Total Flow (m3) #DIV/0!

Calculations

Calibrator Flow (Qa) = 1/Slope*(SQRT(H20*(Ta/Pa))-Intercept)

Pressure Ratio (Po/Pa) = 1-Pf/Pa

% Difference = (Look Up Flow-Calibrator Flow)/Calibrator Flow*100

NOTE: Ensure calibration orifice has been certified within 12 months of use